USGS

WATER RESOURCES RESEARCH GRANT PROPOSAL

Project ID: 2004SD18B

Title: Hydraulic Calibration of the Upper Soil Layers in a Glacial Till System

Project Type: Research

Focus Categories: Agriculture, Hydrology, Non Point Pollution

Keywords: Agriculture, Soil Water Movement, Soil Physics

Start Date: 03/01/2004

End Date: 02/28/2005

Federal Funds Requested: $17,300

Non-Federal Matching Funds Requested: $36,003

Congressional District: First

Principal Investigators:
Todd P. Trooien

Hal D. Werner

Abstract

Runoff models could be used for estimating impacts in eastern South Dakota but they require validation with measured field data to be credible. This project will measure runoff rate and volume and be used to calibrate a runoff model such as HEC. Two sites have been established in small agricultural watersheds and will be used for this study. Additional data to be collected include precipitation at the sites, drain line flow rate, and water table elevations. Evapotranspiration will be estimated with measured weather data. One MS-level graduate student will be funded with this project.